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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/668,527

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Jeyhan Karaoguz

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GARLICK HARRISON & MARKISON

P.O. BOX 160727

AUSTIN, TX 78716-0727

EXAMINER

WONG, BLANCHE

ART UNIT

PAPER NUMBER

2619

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/668,527	<b>Applicant(s)</b> KARAOGUZ, JEYHAN	
	<b>Examiner</b> Blanche Wong	<b>Art Unit</b> 2619	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 19 May 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-58 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 16-26 and 50-58 is/are allowed.
- 6) ☒ Claim(s) 1-15 and 27-49 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments with respect to claims 1-58 have been considered but are moot in view of the new ground(s) of rejection.

### ***Claim Objections***

2. Claims 1-58 are objected to because of the following informalities:

With regard to claims 1-58, Examiner suggests introducing the material subject matter first and then following by its respective abbreviation in parenthesis because limitations within parentheses are not part of the claim.

With regard to claim 1, Examiner suggests replacing "the DEVs" in line 16 with "the plurality of DEVs" in consistent with the claim language.

With regard to claim 2, Examiner suggests replacing "the DEVs in line 8 with "the plurality of DEVs" in consistent with the claim language.

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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4. **Claims 1-15,27-49** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

With regard to claim 1, it is unclear what is the "round trip of the transmitted UWB pulse and the received UWB pulse" in lines 10-11, and whether this round trip of the UWB is from the perspective of the PNC. See Allowable Subject Matter below.

With regard to claim 2, it is unclear what is meant by "the PNC is a first PNC" in line 3, or whether it means to say "the PNC is the first piconet".

With regard to claim 3, it is unclear what is meant by "corresponding" in "a corresponding p2p profile" in line 4.

With regard to claim 5, it is unclear what is "one or the profiles" in line 2 because there is only "the profile of each group" in claim 1, line 16.

With regard to claim 6, it is unclear what is meant by "relatively" in "relatively close" in line 3.

With regard to claim 11, it is unclear what is meant by "relative" in "relative position" in lines 5 and 9, and what is it relatively to.

With regard to claim 11, it is unclear what are "a first group" in line 2 and "a second group" in line 9 because there are "at least two groups" in claim 1, line 14.

With regard to claim 14, it is unclear what is meant by "approximately" in line 3.

With regard to claim 15, it is unclear what is meant by "approximately" in line 5.

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With regard to claim 27, it is unclear what is the "round trip of the transmitted UWB pulse and the received UWB pulse" in lines 11-12.

With regard to claim 30, it is unclear what is meant by "corresponding" in "a corresponding p2p profile" in line 4.

With regard to claim 32, it is unclear what is "one or the profiles" in line 2 because there is only "the profile of each group" in claim 27, line 19.

With regard to claim 33, it is unclear what are "a first group" in line 2 and "a second group" in line 4 because there are "at least two groups" in claim 27, lines 16-17.

With regard to claim 33, it is unclear what is meant by "relatively" in line 3.

With regard to claim 37, it is unclear what is meant by "approximately" in line 3.

With regard to claim 38, it is unclear what is meant by "approximately" in line 4.

With regard to claim 39, it is unclear what is meant by "relative distance" in line 3.

With regard to claim 40, it is unclear what is meant by "relative positions" in line 2.

With regard to claim 41, it is unclear what is meant by "relative distance" in line 2.

With regard to claim 42, it is unclear what is meant by "relative distance" in line 2.

With regard to claim 43, it is unclear what is meant by "relative distance" in line 4.

With regard to claim 44, it is unclear what are "a first group" in line 2 and "a second group" in line 4 because there are "at least two groups" in claim 39, line 6.

With regard to claim 44, it is unclear what is meant by "relatively" in line 3.

With regard to claim 48, it is unclear what is the "round trip of the transmitted UWB pulse and the received UWB pulse" in lines 9-10.

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With regard to claim 49, it is unclear what is meant by "approximately" in lines 3 and 8.

5. There is insufficient antecedent basis for this limitation in the claim.

Claim 27, line 7, "user DEV".

***Allowable Subject Matter***

6. **Claims 16-26,50-58** are allowed.

7. The following is a statement of reasons for the indication of allowable subject matter:

With regard to claim 1, the prior art of record fails to anticipate or make obvious "... the PNC performs ranging of the relative position of each DEV within the plurality of DEVs using the *respective* time duration of round trip *from the time the PNC transmits a UWB pulse to the DEV to the time the PNC received a UWB pulse back from the DEV* thereby determining the relative distance between the PNC and each DEV within the plurality of DEVs; based on the ranging of each DEV of the plurality of DEVs, the PNC groups the plurality of DEVs into at least two groups and identifies a corresponding profile for each group ..." (with emphasis).

With regard to claim 16, the prior art of record fails to anticipate or make obvious "... based on the specific locations of each DEV of the plurality of DEVs with respect to

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the PNC, the PNC groups the plurality of DEVs into at least two groups and identifies a corresponding profile for each group ...."

With regard to claim 27, the prior art of record fails to anticipate or make obvious "... both the first PNC and the second PNC perform ranging of the relative position of each DEV within the plurality of DEVs using the time duration of round trip time *from the time the first PNC transmits a UWB pulse to the DEV to the time the first PNC received a UWB pulse back from the DEV, and the time duration of round trip time from the time the second PNC transmits a UWB pulse to the DEV to the time the second PNC received a UWB pulse back from the DEV, respectively*, thereby determining the relative distance between the first PNC and the second PNC and each DEV within the plurality of DEVs; based on the ranging of each DEV of the plurality of DEVs, the first PNC and the second PNC operate cooperatively to group the plurality of DEVs into at least two groups and also operate cooperatively to identify a corresponding profile for each group ..." (with emphasis).

With regard to claim 50, the prior art of record fails to anticipate or make obvious "... based on the locations of each DEV of the plurality of DEVs with respect to the PNC, the PNC groups the plurality of DEVs into at least two groups; assigning a corresponding profile for each group ...."

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8. Claims 1,27,39 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

9. Claims 2-15,28-38,40-49 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

### ***Conclusion***

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Blanche Wong whose telephone number is 571-272-3177. The examiner can normally be reached on Monday through Friday, 830am to 530pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edan Orgad can be reached on 571-272-7884. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Blanche Wong/  
Examiner, Art Unit 2619  
August 29, 2008

/Edan Orgad/

Supervisory Patent Examiner, Art Unit 2619